# Dell<sup>™</sup> S2440L Monitor

User's Guide

Setting the display resolution

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Model S2440Lb

July 2012 Rev. A00

# Dell<sup>™</sup> S2440L Monitor User's Guide

About Your Monitor	
Setting Up the Monitor	
Operating the Monitor	
Troubleshooting	
Appendix	

# Notes, Cautions, and Warnings

**NOTE:** A NOTE indicates important information that helps you make better use of your computer.

▲ CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Model S2440Lb

July 2012 Rev. A00

# **About Your Monitor**

Dell<sup>™</sup> S2440L Monitor User's Guide

- Package Contents
- Product Features
- Identifying Parts and Controls
- Monitor Specifications
- Plug and Play Capability
- LCD Monitor Quality and Pixel Policy
- Maintenance Guidelines

### Package Contents

Your monitor ships with the components shown below. Ensure that you have received all the components and contact Dell if something is missing.

**NOTE:** Some items may be optional and may not ship with your monitor. Some features or media may not be available in certain countries.







### **Product Features**

The Dell Professional S2440L flat panel display has an active matrix, Thin-Film Transistor (TFT), Liquid Crystal Display (LCD) and LED backlight. The monitor features include:

- **S2440L**: 60.97 cm (24-inch) viewable area display (measured diagonally). 1920 x 1080 resolution, plus full-screen support for lower resolutions.
- Wide viewing angle to allow viewing from a sitting or standing position, or while moving from side-to-side.
- Tilt capability.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Software and documentation media includes an Information File (INF), Image Color Matching File (ICM), Dell Display Manager software application and product documentation.
- Energy Saver feature for Energy Star compliance.
- Security lock slot.
- Capability to switch from wide aspect to standard aspect ratio while maintaining the image quality.
- EPEAT silver Rating.
- Dell Display Manager Software included (comes in the CD shipped with the monitor).
- Arsenic-Free glass and Mercury-Free for the panel only.
- High Dynamic Contrast Ratio (8,000,000:1).
- 0.5 W standby power when in the sleep mode.
- Energy Gauge shows the energy level being consumed by the monitor in real time.

# **Identifying Parts and Controls**

#### **Front View**





Front panel controls

Label	Description           Function buttons (For more information, see <u>Operating the Monitor</u> )           Power On/Off button (with LED indicator)	
1		
2		

### **Back View**





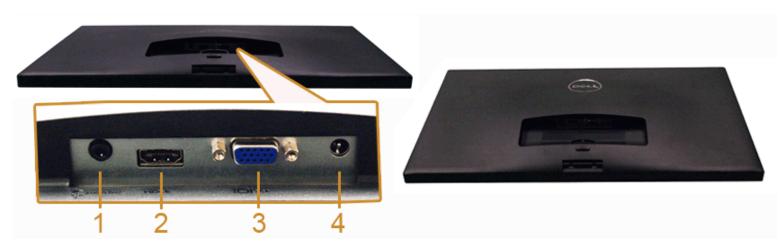
Back View with monitor stand

Label	Description	Use
1         Security lock slot         Secure monitor with security cable lock.		Secure monitor with security cable lock.
2	Regulatory label	List the regulatory approvals.
<b>3</b> Barcode serial number label Refer to this label if you need to contact Dell for technical support.		Refer to this label if you need to contact Dell for technical support.
4	Stand release button	Release stand from monitor.
5	Cable management clip	Use to organize cables by routing them through the clip.

### Side View



### **Bottom View**



Bottom view without monitor stand

Label	Description	Use
1         Audio Line-out         Connect your speakers.*		Connect your speakers.*
2	HDMI connector	Connect your computer HDMI cable.
3	VGA connector Connect your computer VGA cable.	
4	DC power cord connector	Connect the power cable.

\*Headphone usage is not supported for the audio line out connector.

# **Monitor Specifications**

### **Flat Panel Specifications**

Model	S2440L
Screen type	Active matrix - TFT LCD
Panel type	VA
Screen dimensions	60.9 cm (24-inch diagonal viewable image size)
Preset display area:	
Horizontal	531.36 mm (20.92 inches)
Vertical	298.89 mm (11.77 inches)
Pixel pitch	0.277 mm
Viewing angle	178° (vertical) typical
	178° (horizontal) typical
Luminance output	Panel 280 cd/m <sup>2</sup> (Typ.)
	Monitor 250 cd/m <sup>2</sup> (Typ.)
Contrast ratio	5000 to 1 (typical)
	8M to 1 (typical Dynamic Contrast On)
Faceplate coating	Glare with hard-coating 3H
Backlight	LED edgelight system
Response time	12 ms (typical) 6 ms (typical) with Overdrive
Color depth	16.7 million colors
Color gamut	CIE1976 (86%)*

\*S2440L color gamut (typical) is based on CIE1976 (86%) and CIE1931 (72%) test standards.

### **Resolution Specifications**

Model	S2440L
Horizontal scan range	30 kHz to 83 kHz (automatic)
Vertical scan range	56 Hz to 76 Hz (automatic)
Maximum preset resolution	1920 x 1080 at 60 Hz

### Supported Video Modes

Model	S2440L
Video display capabilities (HDMI playback)	480p, 480i, 576p, 576i, 720p, 1080p, 1080i

# Preset Display Modes

S2440L

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/Vertical)
VESA, 720 x 400	31.5	70.1	28.3	-/+
VESA, 640 x 480	31.5	60.0	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.9	60.3	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1920 x 1080	67.5	60.0	148.5	+/+

# **Electrical Specifications**

Model		S2440L
Video input signals		<ul> <li>Analog RGB, 0.7 Volts +/- 5%, positive polarity at 75 ohm input impedance</li> <li>HDMI, 600mV for each differential line, 100 ohm input impedance per differential pair</li> </ul>
Synchronization input signals		Separate horizontal and vertical synchronizations, polarity-free TTL level, SOG (Composite SYNC on green)
AC/DC adapter*	Input voltage/frequency/current	Delta adapter ADP-40DD B: 100 VAC to 240 VAC / 50 Hz to 60 Hz $\pm$ 3 Hz / 1.5 A (Max.), Lite-On adapter PA-1041-71: 100 VAC to 240 VAC / 50 Hz or 60 Hz $\pm$ 3 Hz / 1.2 A

		(Max.)
	Output voltage/current	Output: 12 VDC / 3.33 A
Inrush current		<ul> <li>120 V : 30 A (Max)</li> <li>240 V : 60 A (Max)</li> </ul>

\*Qualified Compatible AC/DC adapters:

**CAUTION:** To avoid damage to the monitor, use only the adapter designed for this particular Dell monitor.

Manufacturer	Model	Polarity
Delta	ADP-40DD BA	⊙_€_€
Lite-On	PA-1041-71TP-LF	<b>⊖</b> _€_ <del>,</del>

# **Physical Characteristics**

Model	S2440L	
Connector type	15-pin D-subminiature, blue connector; HDMI	
Signal cable type	<ul> <li>Analog: attachable, D-Sub, 15 pins, shipped detached from the monitor</li> <li>Digital: HDMI</li> </ul>	
Dimensions (with stand)		
Height	417.9 mm (16.45 inches)	
Width	567.4 mm (22.34 inches)	
Depth	190.8 mm (7.51 inches)	
Dimensions (without stand)		
Height	334.9 mm (13.18 inches)	
Width	567.4 mm (22.34 inches)	
Depth	43.5 mm (1.71 inches)	
Stand dimensions		
Height	137.1 mm (5.4 inches)	
Width	190.8 mm (7.51 inches)	
Depth	190.8 mm (7.51 inches)	
Weight		

Weight with packaging	6.09 kg (13.43 lb)
Weight with stand assembly and cables	5.03 kg (11.09 lb)
Weight without stand assembly	3.66 kg (8.07 lb)
Weight of stand assembly	0.87 kg (1.92 lb)
Front frame gloss	90~100 gloss unit

#### **Environmental Characteristics**

Model	S2440L		
Temperature	Femperature		
Operating	0 °C to 40 °C		
Non-operating	<ul> <li>Storage: -20 °C to 60 °C (-4 °F to 140 °F)</li> <li>Shipping: -20 °C to 60 °C (-4 °F to 140 °F)</li> </ul>		
Humidity	·		
Operating	10% to 80% (non-condensing)		
Non-operating	<ul> <li>Storage: 5% to 90% (non-condensing)</li> <li>Shipping: 5% to 90% (non-condensing)</li> </ul>		
Altitude	·		
Operating	5,000 m (16,404 ft) max		
Non-operating	12,192 m (40,000 ft) max		
Thermal dissipation	<ul> <li>85.30 BTU/hour (maximum)</li> <li>61.42 BTU/hour (typical)</li> </ul>		

#### **Power Management Modes**

If you have VESA's DPM<sup>TM</sup> compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. This is referred to as *Power Save Mode\**. If the computer detects input from the keyboard, mouse, or other input devices, the monitor automatically resumes functioning. The following table shows the power consumption and signaling of this automatic power saving feature:

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	white	25 W (maximum) **
					18 W (typical)
Active-off mode	Inactive	Inactive	Blanked	Amber	Less than 0.5 W
Switch off	-	-	-	Off	Less than 0.5 W

The OSD functions only in the normal operation mode. When any button is pressed in the Active-off mode, one of the following messages will be displayed:

#### Dell S2440L

There is no signal coming from your computer. Press any key on the keyboard or move the mouse to wake it up. If there is no display, press the monitor button now to select the correct input source on the On-Screen-Display menu.



Activate the computer and the monitor to gain access to the OSD.

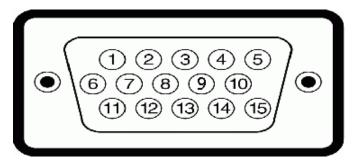


**NOTE:** This monitor is **ENERGY STAR**<sup>®</sup>-compliant.

- \* Zero power consumption in OFF mode can only be achieved by disconnecting the main cable from the monitor.
- \*\* Maximum power consumption with max luminance.

#### **Pin Assignments**

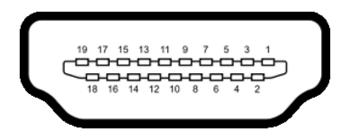
#### **VGA Connector**



Pin Number	15-pin Side of the Connected Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	Self-test

6	GND-R
7	GND-G
8	GND-B
9	Computer 5 V/3.3 V
10	GND-sync
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock

#### **HDMI** Connector



Pin Number	19-pin Side of the Connected Signal Cable
1	TMDS DATA 2+
2	TMDS DATA 2 SHIELD
3	TMDS DATA 2-
4	TMDS DATA 1+
5	TMDS DATA 1 SHIELD
6	TMDS DATA 1-
7	TMDS DATA 0+
8	TMDS DATA 0 SHIELD
9	TMDS DATA 0-
10	TMDS CLOCK+
11	TMDS CLOCK SHIELD
12	TMDS CLOCK-

13	CEC
14	Reserved (N.C. on device)
15	DDC CLOCK (SCL)
16	DDC DATA (SDA)
17	DDC/CEC Ground
18	+5V POWER
19	HOT PLUG DETECT

### **Plug and Play Capability**

You can install the monitor in any Plug and Play-compatible system. The monitor automatically provides the computer system with its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so the system can configure itself and optimize the monitor settings. Most monitor installations are automatic; you can select different settings if desired. For more information about changing the monitor settings, see <u>Operating the Monitor</u>.

### LCD Monitor Quality and Pixel Policy

During the LCD Monitor manufacturing process, it is not uncommon for one or more pixels to become fixed in an unchanging state which are hard to see and do not affect the display quality or usability. For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: **support.dell.com**.

#### **Maintenance Guidelines**

#### **Cleaning Your Monitor**

∧ CAUTION: Read and follow the <u>safety instructions</u> before cleaning the monitor.

WARNING: Before cleaning the monitor, unplug the monitor power cable from the electrical outlet.

For best practices, follow the instructions in the list below while unpacking, cleaning, or handling your monitor:

- To clean your anti-static screen, lightly dampen a soft, clean cloth with water. If possible, use a special screen-cleaning tissue or solution suitable for the anti-static coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air.
- Use a lightly-dampened, warm cloth to clean the monitor. Avoid using detergent of any kind as some detergents leave a milky film on the monitor.
- If you notice white powder when you unpack your monitor, wipe it off with a cloth.
- Handle your monitor with care as a darker-colored monitor may get scratched and show white scuff marks more than a lighter-colored monitor.
- To help maintain the best image quality on your monitor, use a dynamically changing screen saver and turn off your monitor when not in use.

# **Setting Up the Monitor**

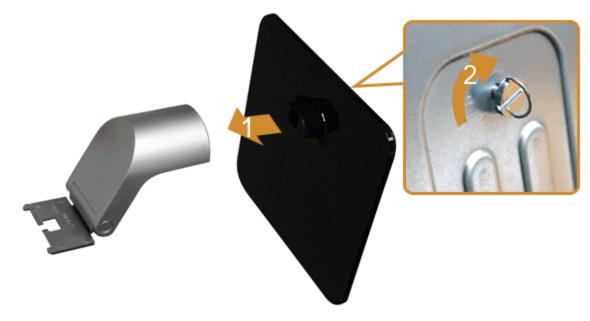
Dell<sup>™</sup> S2440L Monitor User's Guide

- Attaching the Stand
- Connecting the Monitor
- Organizing Your Cables
- Removing the Monitor Stand

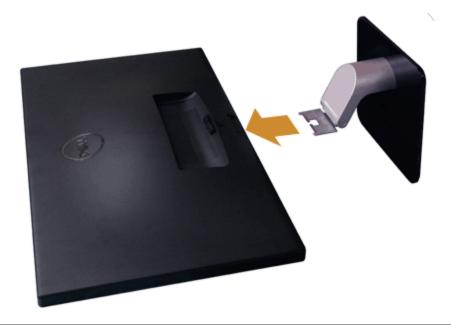
# Attaching the Stand

**NOTE:** The stand riser and stand base are detached when the monitor is shipped from the factory.

- 1. Assemble the stand riser to stand base.
  - a. Attach the stand riser to the stand base.
  - b. Tighten the thumbscrew below the stand base.



- 2. Attach the stand assembly to the monitor.
  - a. Place the monitor on a soft cloth or cushion near the edge of desk.
  - b. Align the stand assembly bracket to the monitor groove.
  - c. Insert the bracket towards monitor until it locked in place.

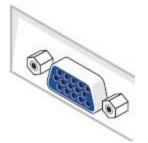


# **Connecting Your Monitor**

**WARNING:** Before you begin any of the procedures in this section, follow the <u>Safety Instructions</u>.

To connect your monitor to the computer:

Turn off your computer and disconnect the power cable.
 Connect the blue (VGA) cable from your monitor to the computer.





**NOTE:** If your computer supports an HDMI connector, connect the HDMI cable (can be purchased separately) to the monitor and the HDMI connector to your computer.



**NOTE:** Do not connect the VGA/HDMI cable to the computer at the same time.

2. Connect either the HDMI cable, or the VGA display connector cable to the corresponding video port on the back of your computer. Do not connect both cables on the same computer. Use both cables only when they are connected to two different computers with appropriate video systems.

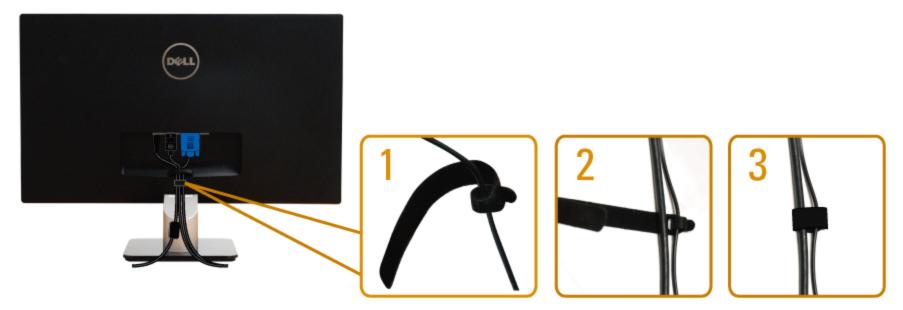
### Connecting the blue VGA cable



### Connecting the HDMI cable



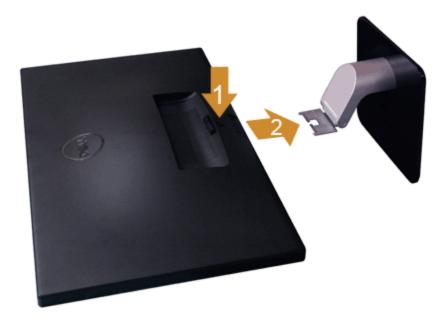
# **Organizing Your Cables**



After attaching all necessary cables to your monitor and computer, (See Connecting Your Monitor for cable attachment,) organize all cables as shown above.

# **Removing the Monitor Stand**

- **NOTE:** To prevent scratches on the LCD screen while removing the stand, ensure that the monitor is placed on a soft, clean surface.
- **NOTE:** This is applicable for a monitor with a stand. When any other stand is bought, please refer to the respective stand setup guide for the set-up instructions.



To remove the stand:

- 1. Place the monitor on a flat surface.
- 2. Press and hold the stand release button.
- 3. Remove the stand.

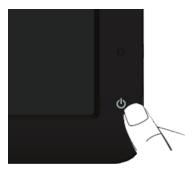
### **Operating the Monitor**

Dell<sup>™</sup> S2440L Monitor User's Guide

- Power On the Monitor
- Using the Front Panel Controls
- Using the On-Screen Display (OSD) Menu
- Setting the Maximum Resolution
- Using the Tilt

#### Power On the Monitor

Press the button to turn on the monitor



#### **Using the Front Panel Controls**

Use the control buttons on the front of the monitor to adjust the characteristics of the image being displayed. As you use these buttons to adjust the controls, an OSD shows the numeric values of the characteristics as they change.



#### The following table describes the front panel buttons:

	Front Panel Button	Description
1	Shortcut key/ Preset Modes	Use this button to choose from a list of preset color modes.
2	Shortcut key/ Brightness/Contrast	Use this button to directly access the "Brightness/Contrast" menu.
3	Menu	Use the MENU button to launch the On-Screen Display (OSD) and select the OSD Menu. See Accessing the Menu System.
4	Exit	Use this button to go back to the main menu or exit the OSD main menu.
5	Power (with power light indicator)	Use the Power button to turn the monitor On and Off. The white light indicates the monitor is On and fully functional. An amber light indicates the power save mode.

#### **Front Panel Button**

<u>Use the buttons</u> on the front of the monitor to adjust the image settings.



	Front Panel Button	Description	
1	1 Use the Up button to adjust (increase ranges) items in the OSD menu.		
2	Down	Jse the Down button to adjust (decrease ranges) items in the OSD menu.	
3	ОК	Use the OK button to confirm your selection.	
4	Back	Use the Back button to go back to the previous menu.	

#### Using the On-Screen Display (OSD) Menu

#### Accessing the Menu System

**NOTE:** If you change the settings and then either proceed to another menu or exit the OSD menu, the monitor automatically saves those changes. The changes are also saved if you change the settings and then wait for the OSD menu to disappear.

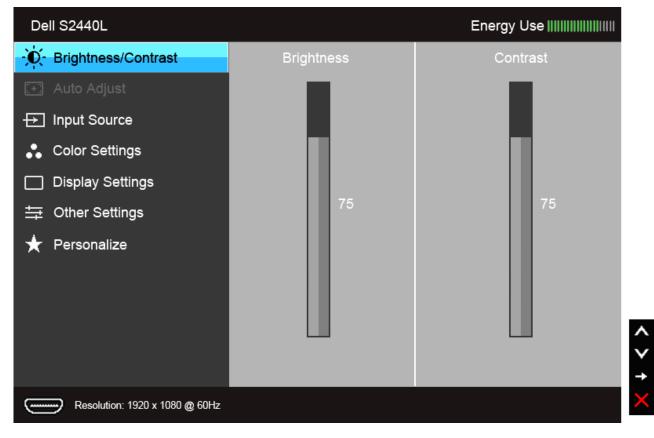
1. Press the button to launch the OSD menu and display the main menu.

```
Main Menu for analog (VGA) input
```

Dell S2440L		Energy Use IIIIIIIIIIIIIIIIIIIIIIII
• Brightness/Contrast	Brightness	Contrast
💽 Auto Adjust		
→ Input Source		
Color Settings		
Display Settings		
	75	75
★ Personalize		▲
		→ ×
Resolution: 1920 x 1080 @ 60Hz		

or

Main Menu for digital (HDMI) input



**NOTE:** Auto Adjust is only available when you use the analog (VGA) connector.

2. Press the and buttons to move between the setting options. As you move from one icon to another, the option name is highlighted. See the following table for a complete list of all the options available for the monitor.

3. Press the button once to activate the highlighted option.

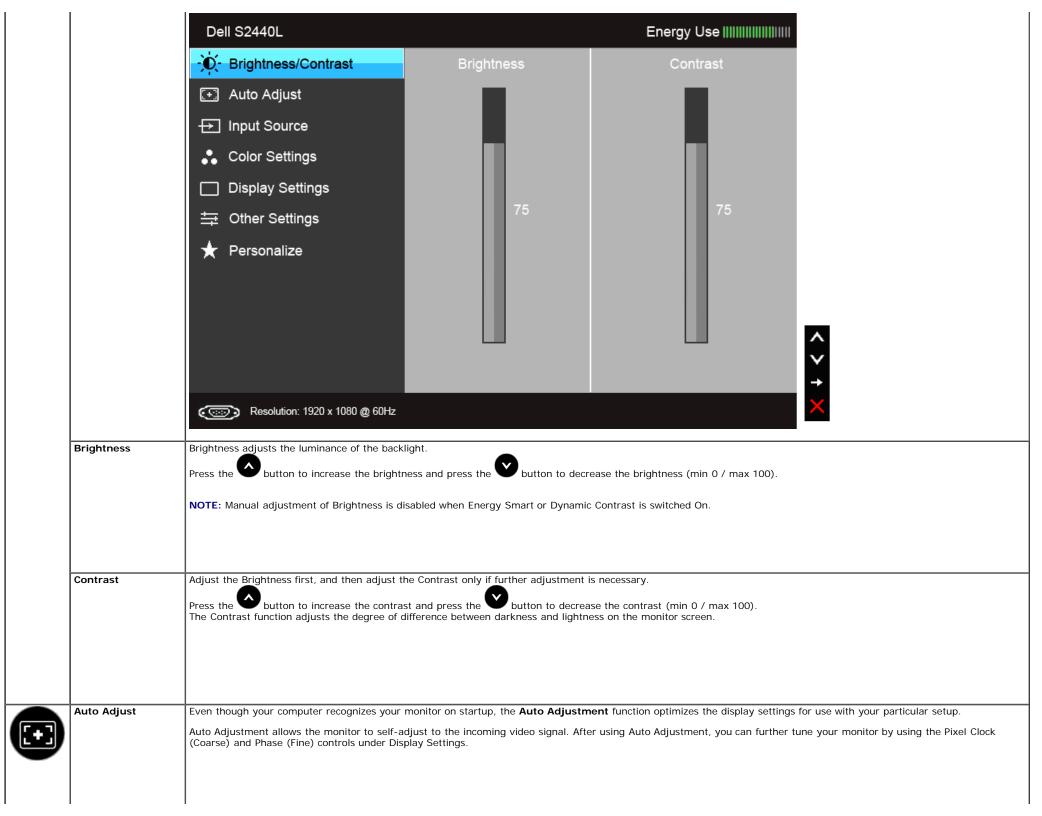
4. Press and button to select the desired parameter.

to enter the slide bar and then use the and the buttons, according to the indicators on the menu, to make your changes.

6. Select the **b**utton to return to the main menu.

5. Press

Menu and Submenus	Description
Brightness/Contrast	Use this menu to activate Brightness/Contrast adjustment.



		Auto Adjustment in Progress NOTE: In most cases, Auto Adjust produces the best image for your configuration.
	Input Source	NOTE: Auto Adjust option is only available when you are using the analog (VGA) connector.         Use the Input Source menu to select between the different video signals that may be connected to your monitor.
$\blacksquare$		Dell S2440L         Energy Use []]]]]]]]
		- D- Brightness/Contrast 🗸 Auto Select
		Auto Adjust VGA
		HDMI
		Color Settings
		Display Settings
		tip Other Settings
		★ Personalize
		Resolution: 1920 x 1080 @ 60Hz
	Auto Select	Press to select Auto Select, the monitor scans for available input sources.
	VGA	Select the VGA input when you are using the analog (VGA) connector. Press to select the VGA input source.
	HDMI	Select HDMI input when you are using the HDMI connector. Press to select the HDMI input source.
8	Color Settings	Use Color Settings to adjust the color setting mode.

	Dell S2440L		Energy Use
	- D- Brightness/Contrast	Input Color Format	► RGB
	💽 Auto Adjust	Preset Modes	Standard
	→ Input Source	Image Enhance	▶ Off
	Color Settings	Reset Color Settings	
	Display Settings		
	🛨 Personalize		
	Resolution: 1920 x 1080 @ 60	Hz	
Color Format	Allows you to set the video input mode t		
	<b>RGB</b> : Select this option if your monitor is <b>YPbPr</b> : Select this option if your monitor	s connected to a computer or DVD pla r is connected to a DVD player by YPbl	yer using the VGA cable. Pr to VGA cable; or if the DVD color outp

	Dell S2440L		Energy Use
	- O- Brightness/Contrast	Input Color Format	RGB
	💽 Auto Adjust	Preset Modes	YPbPr
	→ Input Source	Image Enhance	▶ Off
	Color Settings	Reset Color Settings	
	Display Settings		
	🛨 Personalize		
	Resolution: 1920 x 1080 @ 60	Hz	
des			ie, Game, Text, Warm, Cool or Custom Col
	<ul> <li>Multimedia: Loads color settings</li> <li>Movie: Loads color settings ideal t</li> <li>Game: Loads color settings ideal f</li> <li>Text: Loads brightness and sharpr</li> <li>Warm: Increase the color temperation</li> <li>Cool: Decreases the color temperation</li> <li>Custom Color: Allows you to mar</li> </ul>	for movies. for most gaming applications. ness settings ideal for viewing texts. ature. The screen appears warmer with ature. The screen appears cooler with a	n a red/yellow tint.
	preset color mode.		

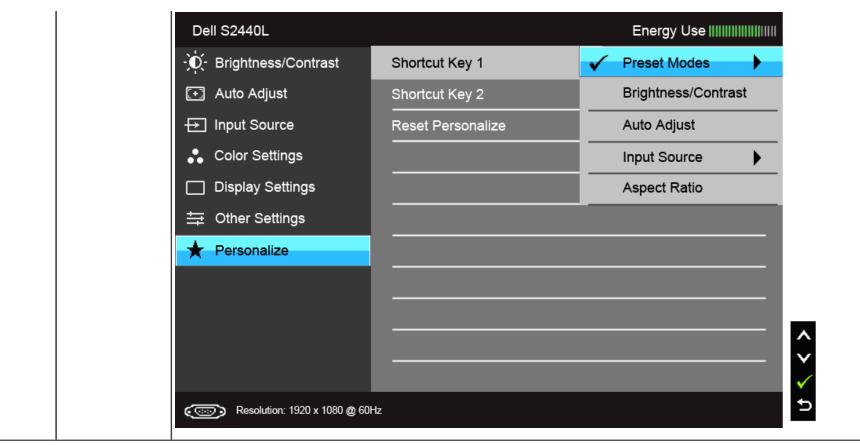
	Dell S2440L		Energy Use	
	- O- Brightness/Contrast	Input Color Format		
	🖅 Auto Adjust	Preset Modes	Standard	
	→ Input Source	Image Enhance	Multimedia	
	Color Settings	Reset Color Settings	Movie	
	Display Settings		Game	
			Text	
	🛨 Personalize		Warm	
			Cool	
			Custom Color	
ue	C Resolution: 1920 x 1080 @ 0			5
le	This feature can shift the color of the video in	mage to green or purple. This is used to a	adjust the desired flesh tone color. Use 🔷 or 오	to adjust the hue from 'C
Je	This feature can shift the color of the video in Press to increase the green shade of the	mage to green or purple. This is used to a	adjust the desired flesh tone color. Use 📀 or 오	to adjust the hue from 'C
91	This feature can shift the color of the video in Press to increase the green shade of the Press to increase the purple shade of the	mage to green or purple. This is used to a e video image. ne video image.		to adjust the hue from 'C
ue	This feature can shift the color of the video in Press to increase the green shade of the Press to increase the purple shade of the NOTE:: Hue adjustment is available only whe This feature can adjust the color saturation of	mage to green or purple. This is used to a e video image. ne video image. en you select Movie or Game preset mode f the video image. Use or or to a		to adjust the hue from 'C
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aturation	This feature can shift the color of the video in Press to increase the green shade of the Press to increase the purple shade of the NOTE:: Hue adjustment is available only when This feature can adjust the color saturation of Press to increase the monochrome appendent Press to increase the colorful appearance NOTE: Saturation adjustment is available only	mage to green or purple. This is used to a e video image. en you select Movie or Game preset mode of the video image. Use or vot to a earance of the video image. ce of the video image. y when you select Movie or Game preset	e. adjust the saturation from '0' to '100'. mode.	to adjust the hue from 'C
	This feature can shift the color of the video in Press to increase the green shade of the Press to increase the purple shade of the NOTE:: Hue adjustment is available only whe This feature can adjust the color saturation of Press to increase the monochrome apper Press to increase the colorful appearance NOTE: Saturation adjustment is available only Splits the screen into two for viewing the image	mage to green or purple. This is used to a e video image. en video image. en you select Movie or Game preset mode of the video image. Use or or to a earance of the video image. ce of the video image. y when you select Movie or Game preset ges under the normal and enhanced Mov	e. adjust the saturation from '0' to '100'. mode.	to adjust the hue from 'C
aturation	This feature can shift the color of the video in Press to increase the green shade of the Press to increase the purple shade of the NOTE:: Hue adjustment is available only whe This feature can adjust the color saturation of Press to increase the monochrome apper Press to increase the colorful appearance NOTE: Saturation adjustment is available only Splits the screen into two for viewing the image	mage to green or purple. This is used to a e video image. en video image. en you select Movie or Game preset mode of the video image. Use or or to a earance of the video image. ce of the video image. ce of the video image. y when you select Movie or Game preset ges under the normal and enhanced Mov pusty to enable/disable this mode.	e. adjust the saturation from '0' to '100'. mode.	to adjust the hue from 'C
aturation	This feature can shift the color of the video in Press to increase the green shade of the Press to increase the purple shade of the NOTE:: Hue adjustment is available only when This feature can adjust the color saturation of Press to increase the monochrome apper Press to increase the colorful appearance NOTE: Saturation adjustment is available only Splits the screen into two for viewing the image You can also press and simultaneous	mage to green or purple. This is used to a e video image. ne video image. en you select Movie or Game preset mode of the video image. Use or or or to a earance of the video image. ce of the video image. (y when you select Movie or Game preset ges under the normal and enhanced Mov pously to enable/disable this mode. ou select Movie preset mode.	e. adjust the saturation from '0' to '100'. mode. rie preset mode side by side.	to adjust the hue from '0

Desist Online Cotting				
Reset Color Setting s	Reset your monitor color settings to the	e factory settings.		
Display Settings	Use the Display Settings to adjust imag	je.		
	Dell S2440L		Energy Use [[[]]]	ш
	- O- Brightness/Contrast	Aspect Ratio	▶ Wide 16:9	
	王 Auto Adjust	Horizontal Position	▶ 50	
	→ Input Source	Vertical Position	▶ 50	
	Color Settings	Sharpness	▶ 50	
	Display Settings	Pixel Clock	▶ 50	
	井 Other Settings	Phase	▶ 50	
	🛨 Personalize	Dynamic Contrast		
		Reset Display Settings		
				·
	Comp Resolution: 1920 x 1080 @ 6	60Hz		×
Aspect Ratio	Adjusts the image ratio to Wide 16:9, 4	1:3, or 5:4.		
Horizontal Position	Use or to adjust the image I	eft or right. Minimum is '0' (-). Maxim	um is '100' (+).	
Vertical Position	Use or to adjust the image up or down. Minimum is '0' (-). Maximum is '100' (+).			
	NOTE: Horizontal Position and Vertical	Position adjustments are only availab	e for "VGA" input.	
Sharpness	This feature can make the image look s	sharper or softer. Use 🐼 or 💟 to	adjust the sharpness from '0' to '100'.	
Pixel Clock	This feature can make the image look sharper or softer. Use or or to adjust the sharpness from '0' to '100'. The Phase and Pixel Clock adjustments allow you to adjust your monitor to your preference.			
	Use or to adjust for best im			

Dynamic Contrast	NOTE: Pixel Clock and Phase adjustme		ed image quality		
	ynamic Contrast       Allows you to increase the level of contrast to provide sharper and more detailed image quality.         Press the evel button to select the Dynamic Contrast "On" or "Off" .				
	NOTE: Dynamic Contrast provides high		preset mode		
Reset Display Settings	Select this option to restore default disp				
Other Settings	Select this option to adjust the settings	of the OSD, such as, the languages of	the OSD, the amount of time the menu	remains on screen, and so on.	
	Dell S2440L		Energy Use IIIIIIII		
	• Brightness/Contrast	Language	English		
	王 Auto Adjust	Menu Transparency	20		
	→ Input Source	Menu Timer	▶ 20 s		
	🛟 Color Settings	Menu Lock	Unlock		
	Display Settings	Energy Smart	Off		
		DDC/CI	Enable		
	🛨 Personalize	LCD Conditioning	Disable		
		Factory Reset	Reset All Settings		
				¥ .	
	د المعنى Resolution: 1920 x 1080 @	60Hz		×	
Language	Language options set the OSD display to one of the eight languages (English, Spanish, French, German, Simplified Chinese or Japanese).				
Menu Transparency			buttons (Minimum: 0 ~ Maximum:		
Menu Timer	Select this option to change the menu to OSD Hold Time: sets the length of time			: 100).	
		1 second increments, from 5 to 60 se			
Menu Lock	Controls user access to adjustments. W				
		Jh the OSD menu) or hard lock (press a ess and hold the button above the pow	nd hold the button above the power but er button for 10 seconds)	ton for 10 seconds)	
Energy Smart	To turn <b>on</b> or <b>off</b> dynamic dimming.		vel when the displayed image contains a		

DC/CI	DDC/CI (Display Data Channel/Comma You can disable this feature by selectin Enable this feature for best user experi	g "Disable".		tc.) to be adjustable via the software on your com
	Dell S2440L		Energy Use	
	- Drightness/Contrast	Language		
	⊡ Auto Adjust	Menu Transparency	Menu Transparency	
	→ Input Source	Menu Timer	Menu Timer	
	Color Settings	Menu Lock		
	Display Settings	Energy Smart		
		DDC/CI	Enable	
	🖈 Personalize	LCD Conditioning	Disable	
		Factory Reset		
				_
				— •
	Resolution: 1920 x 1080 @ @	50Hz		5
D Conditionin	g Helps reduce minor cases of image rete "Enable".	ention. Depending on the degree of images	age retention, the program may take som	ne time to run. You can enable this feature by sele

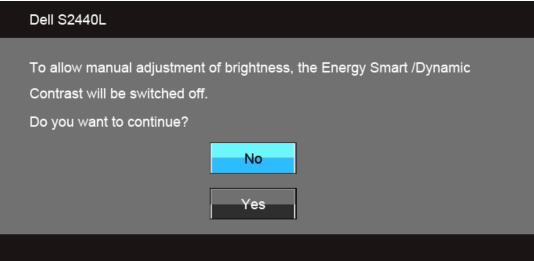
I					1
		Dell S2440L		Energy Use	
		- Č- Brightness/Contrast	Language		
		⊡ Auto Adjust	Menu Transparency		
		↔ Input Source	Menu Timer		
		Color Settings	Menu Lock		
		Display Settings	Energy Smart		
			DDC/CI		
		🖈 Personalize	LCD Conditioning	Enable	
			Factory Reset	V Disable	
					∧ ∨
					$\checkmark$
		Resolution: 1920 x 1080 @ 60Hz	2		5
	Factory Reset	Reset all OSD settings to the factory prese	tvalues		
_	Personalize		odes", "Brightness/Contrast", "Auto Adjust", "	Input Courses, or "Append Datio" and a	t it as a shortout kay



**NOTE**: This monitor has a built-in feature to automatically calibrate the brightness to compensate for LED aging.

#### **OSD Warning Messages**

When the Energy Smart or Dynamic Contrast feature is enabled (in these preset modes: Game or Movie), the manual brightness adjustment is disabled.



When the monitor does not support a particular resolution mode, you will see the following message:

#### Dell S2440L

The current input timing is not supported by the monitor display. Please change your input timing to 1920 x 1080 @ 60Hz or any other monitor listed timing as per the monitor specifications.

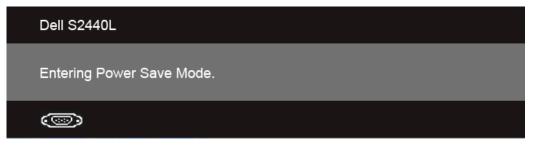
#### Ì

This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See <u>Monitor Specifications</u> for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1920 x 1080.

You will see the following message before the DDC/CI function is disabled:

Dell S2440L
The function of adjusting display setting using PC application will be disabled.
Do you wish to disable DDC/CI function?

When the monitor enters the Power Save mode, the following message appears:



Activate the computer and wake up the monitor to gain access to the OSD.

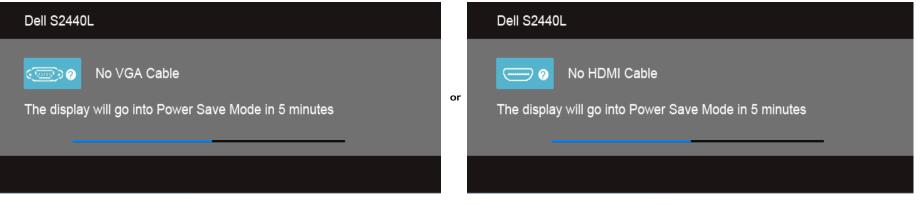
If you press any button other than the power button, one of the following messages will appear depending on the selected input: VGA/HDMI input

#### Dell S2440L

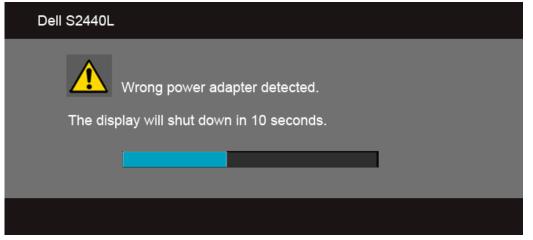
There is no signal coming from your computer. Press any key on the keyboard or move the mouse to wake it up. If there is no display, press the monitor button now to select the correct input source on the On-Screen-Display menu.



If either VGA, or HDMI input is selected and the corresponding cable is not connected, a floating dialog box as shown below appears.



It is recommended that you use the supplied power adapter. If not, you will see the message as shown below.



See <u>Solving Problems</u> for more information.

#### Setting the Maximum Resolution

To set the maximum resolution for the monitor:

Windows Vista $^{\textcircled{R}}$  , Windows R 7, Windows R 8:

- 1. For Windows  $^{\ensuremath{\mathbb{B}}}$  8 only, select the Desktop tile to switch to classic desktop.
- 2. Right-click on the desktop and click **Screen Resolution**.
- 3. Click the Dropdown list of the Screen Resolution and select 1920 x 1080.
- 4. Click OK.

If you do not see 1920 x 1080 as an option, you may need to update your graphics driver. Depending on your computer, complete one of the following procedures:

If you have a Dell desktop or portable computer:

• Go to support.dell.com, enter your service tag, and download the latest driver for your graphics card.

If you are using a non-Dell computer (portable or desktop):

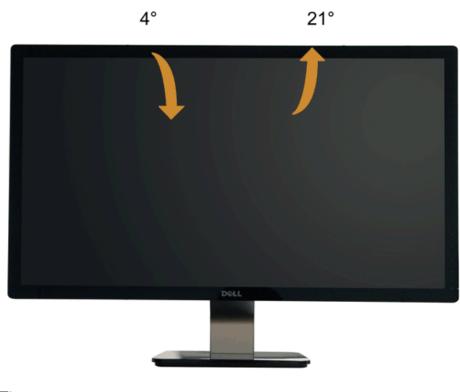
- Go to the support site for your computer and download the latest graphic drivers.
- Go to your graphics card website and download the latest graphic drivers.

#### Using the Tilt

NOTE: This is applicable for a monitor with a stand. When any other stand is bought, please refer to the respective stand setup guide for set up instructions.

#### Tilt

With the stand attached to the monitor, you can tilt the monitor for the most comfortable viewing angle.



**NOTE:** The stand is detached when the monitor is shipped from the factory.

## Troubleshooting

Dell<sup>™</sup> S2440L Monitor User's Guide

- Self-Test
- Built-in Diagnostics
- In-Store Demo
- Common Problems
- Product Specific Problems
- WARNING: Before you begin any of the procedures in this section, follow the Safety Instructions.

### Self-Test

Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

- 1. Turn off both your computer and the monitor.
- 2. Unplug the video cable from the back of the computer. To ensure proper Self-Test operation, remove all the digital and analog cables from the back of computer.
- 3. Turn on the monitor.

The floating dialog box should appear on-screen (against a black background), if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains white. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.



4. This box also appears during normal system operation, if the video cable becomes disconnected or damaged.

5. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after you use the previous procedure, check your video controller and computer, because your monitor is functioning properly.

#### **Built-in Diagnostics**

Your monitor has a built-in diagnostic tool that helps you determine if the screen abnormality you are experiencing is an inherent problem with your monitor, or with your computer and video card.

MOTE: You can run the built-in diagnostics only when the video cable is unplugged and the monitor is in self-test mode.



To run the built-in diagnostics:

- 1. Ensure that the screen is clean (no dust particles on the surface of the screen).
- 2. Unplug the video cable(s) from the back of the computer or monitor. The monitor then goes into the self-test mode.
- 3. Press and hold Button 1 and Button 4 on the front panel simultaneously for 2 seconds. A gray screen appears.
- 4. Carefully inspect the screen for abnormalities.
- 5. Press Button 4 on the front panel again. The color of the screen changes to red.
- 6. Inspect the display for any abnormalities.
- 7. Repeat steps 5 and 6 to inspect the display in green, blue, black, white and text screens.

The test is complete when the text screen appears. To exit, press Button 4 again.

If you do not detect any screen abnormalities upon using the built-in diagnostic tool, the monitor is functioning properly. Check the video card and computer.

#### **In-Store Demo**

To enter InStore OSD Mode Detach/Disconnect all cables. Make sure the monitor is in "On" mode. Press and hold **Button 2** and **Button 4** for 5 seconds.

To exit InStore OSD Mode Press the power button once. If power is cut off during demo, resume the demo after power is restored.

#### **Common Problems**

The following table contains general information about common monitor problems you might encounter and the possible solutions:

Common Symptoms	What You Experience	Possible Solutions
No Video/Power LED off	No picture	<ul> <li>Ensure that the video cable connecting the monitor and the computer is properly connected and secure.</li> <li>Verify that the power outlet is functioning properly using any other electrical equipment.</li> <li>Ensure that the power button is depressed fully.</li> <li>Ensure that the correct input source is selected via the <u>Input Source Select</u> menu.</li> </ul>
No Video/Power LED on	No picture or no brightness	<ul> <li>Increase brightness &amp; contrast controls via OSD.</li> <li>Perform monitor self-test feature check.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Run the built-in diagnostics.</li> <li>Ensure that the correct input source is selected via the <u>Input Source Select</u> menu.</li> </ul>
Poor Focus	Picture is fuzzy, blurry, or ghosting	Perform Auto Adjust via OSD.

		<ul> <li>Adjust the Phase and Pixel Clock controls via OSD.</li> <li>Eliminate video extension cables.</li> <li>Reset the monitor to Factory Settings.</li> <li>Change the video resolution to the correct aspect ratio (16:9).</li> </ul>	
Shaky/Jittery Video	Wavy picture or fine movement	<ul> <li>Perform Auto Adjust via OSD.</li> <li>Adjust the Phase and Pixel Clock controls via OSD.</li> <li>Reset the monitor to Factory Settings.</li> <li>Check environmental factors.</li> <li>Relocate the monitor and test in another room.</li> </ul>	
Missing Pixels	LCD screen has spots	<ul> <li>Cycle power on-off.</li> <li>Pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: support.dell.com.</li> </ul>	
Stuck-on Pixels	LCD screen has bright spots	<ul> <li>Cycle power on-off.</li> <li>Pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: support.dell.com.</li> </ul>	
Brightness Problems	Picture too dim or too bright	<ul> <li>Reset the monitor to Factory Settings.</li> <li>Auto Adjust via OSD.</li> <li>Adjust brightness &amp; contrast controls via OSD.</li> </ul>	
Geometric Distortion	Screen not centered correctly	<ul> <li>Reset the monitor to Factory Settings.</li> <li>Auto Adjust via OSD.</li> <li>Adjust horizontal &amp; vertical controls via OSD.</li> </ul>	
Horizontal/Vertical Lines	Screen has one or more lines	<ul> <li>NOTE: When using HDMI input, the positioning adjustments are not available.</li> <li>Reset the monitor to Factory Settings.</li> <li>Perform Auto Adjust via OSD.</li> <li>Adjust Phase and Pixel Clock controls via OSD.</li> <li>Perform monitor self-test feature check and determine if these lines are also in self-test mode.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Run the built-in diagnostics.</li> </ul>	
Synchronization Problems	Screen is scrambled or appears torn	<ul> <li>NOTE: When using HDMI input, the Pixel Clock and Phase adjustments are not available.</li> <li>Reset the monitor to Factory Settings.</li> </ul>	
		<ul> <li>Perform Auto Adjust via OSD.</li> <li>Adjust Phase and Pixel Clock controls via OSD.</li> <li>Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Restart the computer in the <i>safe mode</i>.</li> </ul>	
Safety Related Issues	Visible signs of smoke or sparks	<ul><li>Do not perform any troubleshooting steps.</li><li>Contact Dell immediately.</li></ul>	
Intermittent Problems	Monitor malfunctions on & off	<ul> <li>Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.</li> <li>Reset the monitor to Factory Settings.</li> <li>Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.</li> </ul>	
Missing Color	Picture missing color	<ul> <li>Perform monitor self-test feature check.</li> <li>Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.</li> <li>Check for bent or broken pins in the video cable connector.</li> </ul>	
Wrong Color	Picture color not good	<ul> <li>Change the Color Setting Mode in the Color Settings OSD to Graphics or Video depending on the application.</li> <li>Try different Color Preset Settings in Color Settings OSD. Adjust R/G/B value in Color Settings OSD if the Color Management is turned off.</li> <li>Change the Input Color Format to PC RGB or YPbPr in the Advance Setting OSD.</li> <li>Run the built-in diagnostics.</li> </ul>	
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	<ul> <li>Use the Power Management feature to turn off the monitor at all times when not in use (for more information, see <u>Power Management Modes</u>).</li> <li>Alternatively, use a dynamically changing screensaver.</li> </ul>	

### **Product Specific Problems**

Specific Symptoms	What You Experience	Possible Solutions
Screen image is too small	Image is centered on screen, but does	Check the Scaling Ratio setting in the Image Setting OSD.
	not fill entire viewing area	Reset the monitor to Factory Settings.
Cannot adjust the monitor with the	OSD does not appear on the screen	<ul> <li>Turn off the monitor, unplug the power cord, plug it back, and then turn on the monitor.</li> </ul>
buttons on the front panel		<ul> <li>Check whether the OSD menu is locked. If yes, press and hold the button above the Power button for 10 seconds to unlock (for more information, see <u>Menu Lock</u>).</li> </ul>
No Input Signal when user controls are pressed	No picture, the LED light is blue.	<ul> <li>Check the signal source. Ensure the Computer is not in the power saving mode by moving the mouse or pressing any key on the keyboard.</li> </ul>
		Check whether the signal cable is plugged in properly. Re-plug the signal cable if necessary.
		Reset the computer or video player.
The picture does not fill the entire	The picture cannot fill the height or	Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen.
screen.	width of the screen	Run the built-in diagnostics.
NOTE: When choosing HDMI mode,	the Auto Adjust function will not be avail	able.

# **Appendix**

Dell<sup>™</sup> S2440L Monitor User's Guide

- Safety Instructions
- FCC Notice (U.S. Only) and Other Regulatory Information
- Contacting Dell

# MARNING: Safety Instructions

MARNING: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.

For information on safety instructions, see the Product Information Guide.

# FCC Notices (U.S. Only) and Other Regulatory Information

For FCC notices and other regulatory information, see the regulatory compliance website located at <u>www.dell.com\regulatory\_compliance</u>.

# **Contacting Dell**

For customers in the United States, call 800-WWW-DELL (800-999-3355).

**NOTE:** If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- 1. Visit support.dell.com.
- 2. Verify your country or region in the Choose A Country/Region drop-down menu at the bottom of the page.
- 3. Click **Contact Us** on the left side of the page.
- 4. Select the appropriate service or support link based on your need.
- 5. Choose the method of contacting Dell that is convenient for you.

# **Setting Up Your Monitor**

Dell<sup>™</sup> S2440L Monitor User's Guide

### Setting the display resolution

For maximum display performance with Microsoft<sup>®</sup> Windows<sup>®</sup> operating systems, set the display resolution to **1920 x 1080** pixels by performing the following steps:

In Windows Vista<sup>®</sup>, Windows<sup>®</sup> 7, Windows<sup>®</sup> 8:

- 1. For Windows<sup>®</sup> 8 only, select the Desktop tile to switch to classic desktop.
- 2. Right-click on the desktop and click Screen Resolution.
- 3. Click the Dropdown list of the Screen Resolution and select 1920 x 1080.

#### 4. Click **OK**.

If you do not see the recommended resolution as an option, you may need to update your graphics driver. Please choose the scenario below that best describes the computer system you are using, and follow the given steps.

- 1: If you have a Dell<sup>™</sup> desktop or a Dell<sup>™</sup> portable computer with internet access.
- 2: If you have a non Dell<sup>™</sup> desktop, portable computer, or graphics card.

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# If you have a Dell<sup>™</sup> desktop or a Dell<sup>™</sup> portable computer with internet access

1. Go to http://support.dell.com, enter your service tag, and download the latest driver for your graphics card.

2. After installing the drivers for your graphics adapter, attempt to set the resolution to **1920 x 1080** again.

**IVENTE:** If you are unable to set the resolution to 1920 x 1080, please contact Dell<sup>™</sup> to inquire about a graphics adapter that supports these resolutions.

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## If you have a non Dell<sup>™</sup> desktop, portable computer, or graphics card

In Windows Vista<sup>®</sup>, Windows<sup>®</sup> 7, Windows<sup>®</sup> 8:

1. For Windows<sup>®</sup> 8 only, select the Desktop tile to switch to classic desktop.

- 2. Right-click on the desktop and click **Personalization**.
- 3. Click Change Display Settings.
- 4. Click Advanced Settings.
- 5. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
- 6. Refer to the graphic card provider website for updated driver (for example, <u>http://www.ATI.com</u> OR <u>http://www.NVIDIA.com</u>).
- 7. After installing the drivers for your graphics adapter, attempt to set the resolution to **1920 x 1080** again.

**NOTE:** If you are unable to set the recommended resolution, please contact the manufacturer of your computer or consider purchasing a graphics adapter that will support the video resolution.